

knexfile.js x 20230613181159_migrat... x 01_seed_data.js x alunos.js x professores.js +

knexfile.js > <unknown> > ...

```
1 module.exports = {  
2   development: {  
3     client: 'sqlite3',  
4     connection: {  
5       filename: './SCA.db'  
6     },  
7     useNullAsDefault: true  
8   }  
9 };
```

```
knexfile.js x 20230613181159_migrat... x 01_seed_data.js x alunos.js x professores.js +
migrations > 20230613181159_migration_name.js > f up > ...
1 exports.up = function(knex) {
2   return knex.schema
3     .createTable('tb_alunos', function(table) {
4       table.increments('id').primary();
5       table.string('nome').nullable();
6       table.string('email').nullable().unique();
7     })
8     .createTable('tb_professores', function(table) {
9       table.increments('id').primary();
10      table.string('nome').nullable();
11      table.string('email').nullable().unique();
12    })
13     .createTable('tb_disciplinas', function(table) {
14       table.increments('id').primary();
15       table.string('nome').nullable();
16       table.integer('professor_id').unsigned().references('id').inTable('professores');
17     });
18 };
19
20 exports.down = function(knex) {
21   return knex.schema
22     .dropTableIfExists('tb_disciplinas')
23     .dropTableIfExists('tb_alunos')
24     .dropTableIfExists('tb_professores');
25 };
26
```

knexfile.js × 20230613181159_migrat... × 01_seed_data.js × alunos.js × professores.js +

seeds > 01_seed_data.js > ...

```
1 exports.seed = async function(knex) {  
2   await knex('table_name').del()  
3   await knex('table_name').insert([  
4     {id: 1, colName: 'rowValue1'},  
5     {id: 2, colName: 'rowValue2'},  
6     {id: 3, colName: 'rowValue3'}  
7   ]);  
8 };  
9
```

model > alunos.js > ...

```
1  const knex = require('knex');
2
3  const db = knex({
4    client: 'sqlite3',
5    connection: {
6      filename: './database.sqlite3'
7    },
8    useNullAsDefault: true
9  });
10
11 const Alunos = {
12   getAll: async () => {
13     return db('alunos');
14   },
15
16   getById: async (id) => {
17     return db('alunos').where({ id }).first();
18   },
19
20   create: async (aluno) => {
21     return db('alunos').insert(aluno);
22   },
23
24   update: async (id, aluno) => {
25     return db('alunos').where({ id }).update(aluno);
26   },
27
28   delete: async (id) => {
29     return db('alunos').where({ id }).del();
30   }
31 };
32
33 module.exports = Alunos;
34
```

```
1  const knex = require('knex');
2
3  const db = knex({
4    client: 'sqlite3',
5    connection: {
6      filename: './database.sqlite3'
7    },
8    useNullAsDefault: true
9  });
10
11  const Alunos = {
12    getAll: async () => {
13      return db('professores');
14    },
15
16    getById: async (id) => {
17      return db('professores').where({ id }).first();
18    },
19
20    create: async (aluno) => {
21      return db('professores').insert(aluno);
22    },
23
24    update: async (id, aluno) => {
25      return db('professores').where({ id }).update(aluno);
26    },
27
28    delete: async (id) => {
29      return db('professores').where({ id }).del();
30    }
31  };
32
33  module.exports = Professores;
34
```

model > disciplinas.js > ...

```
1  const knex = require('knex');
2
3  const db = knex({
4    client: 'sqlite3',
5    connection: {
6      filename: './database.sqlite3'
7    },
8    useNullAsDefault: true
9  });
10
11 const Alunos = {
12   getAll: async () => {
13     return db('disciplinas');
14   },
15
16   getById: async (id) => {
17     return db('disciplinas').where({ id }).first();
18   },
19
20   create: async (aluno) => {
21     return db('disciplinas').insert(aluno);
22   },
23
24   update: async (id, aluno) => {
25     return db('disciplinas').where({ id }).update(aluno);
26   },
27
28   delete: async (id) => {
29     return db('disciplinas').where({ id }).del();
30   }
31 };
32
33 module.exports = Disciplinas;
```

app.js > f run > ...

```
1  const Alunos = require('./model/alunos');
2  const Professores = require('./model/professores');
3  const Disciplinas = require('./model/disciplinas');
4
5  async function run() {
6    try {
7      const allAlunos = await Alunos.getAll();
8      console.log('Todos os alunos:', allAlunos);
9
10     const newAluno = { nome: 'Pedro', email: 'pedro@example.com' };
11     const createdAluno = await Alunos.create(newAluno);
12     console.log('Aluno criado:', createdAluno);
13
14     const updatedAluno = { nome: 'Pedro Silva', email: 'pedro.silva@example.com' };
15     const idToUpdate = 1;
16     const result = await Alunos.update(idToUpdate, updatedAluno);
17     console.log('Aluno atualizado:', result);
18
19     const idToDelete = 2;
20     const deleteResult = await Alunos.delete(idToDelete);
21     console.log('Aluno deletado:', deleteResult);
22
23     const allProfessores = await Professores.getAll();
24     console.log('Todos os professores:', allProfessores);
25
26     const allDisciplinas = await Disciplinas.getAll();
27     console.log('Todas as disciplinas:', allDisciplinas);
28   }
```


5

× alunos.js × professores.js × disciplinas.js × app.js × SCA.db × package.json ×

package.json > ...

```
1 {  
2   "name": "nodejs",  
3   "version": "1.0.0",  
4   "main": "index.js",  
5   "scripts": {  
6     "test": "echo \"Error: no test specified\" && exit 1"  
7   },  
8   "keywords": [],  
9   "author": "",  
10  "license": "ISC",  
11  "dependencies": {  
12    "@types/node": "^18.0.6",  
13    "knex": "^2.4.2",  
14    "node-fetch": "^3.2.6",  
15    "sqlite3": "^5.1.6"  
16  },  
17  "description": ""  
18 }  
19
```